No. 7600076

THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Colorado State Experiment Station

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED NOVEL VARIETY OF SEXUALLY REPRODUCED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF seventeen YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT. THE UNITED STATES SEED OF THIS VARIETY (1) SHALL BE SOLD BY VARIETY NAME ONLY AS CLASS OF CERTIFIED SEED AND (2) SHALL CONFORM TO THE NUMBER OF GENERATIONS REQUIRED BY THE OWNER OF THE RIGHTS. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

WHEAT

'Lindon'

In Testimony Whereof, *I have hereunto set my hand and caused the seal of the* Plant Variety Protection Office *to be affixed at the City of* Washington *this* 18th *day of* March *in the year of our Lord one thousand nine hundred and* seventy-seven

Attest:

L. J. Rollin

Commissioner
Plant Variety Protection Office
Grain Division
Agricultural Marketing Service

Secretary of Agriculture

FORM GR-470
(12-15-72)

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
GRAIN DIVISION
HYATTSVILLE, MARYLAND 20782

FORM APPROVED
OMB NO. 40-R3712

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

INSTRUCTIONS: *See Reverse.*

1. VARIETY NAME OR TEMPORARY DESIGNATION	2. KIND NAME	FOR OFFICIAL USE ONLY
LINDON	Hard Red Winter Wheat	PV NUMBER 7600076
3. GENUS AND SPECIES NAME	4. FAMILY NAME *(Botanical)*	FILING DATE 5.25.76 / TIME 11:00 A.M.
Triticum aestivum	Gramineae	FEE RECEIVED $250.00 $250.00 $250.00 / BALANCE DUE $ — $ — $ —
	5. DATE OF DETERMINATION: September 1, 1975	

6. NAME OF APPLICANT(S)	7. ADDRESS *(Street and No. or R.F.D. No., City, State, and ZIP Code)*	8. TELEPHONE AREA CODE AND NUMBER
Colorado State Experiment Station	Colorado State University Fort Collins, Colorado 80523	(303)491-5371

9. IF THE NAMED APPLICANT IS NOT A PERSON, FORM OF ORGANIZATION: *(Corporation, partnership, association, etc.)*	10. STATE OF INCORPORATION	11. DATE OF INCORPORATION
Experiment Station		

12. Name and mailing address of applicant representative(s), if any, to serve in this application and receive all papers:

James R. Welsh
Department of Agronomy
Colorado State University
Fort Collins, Colorado 80523

13. CHECK BOX BELOW FOR EACH ATTACHMENT SUBMITTED:

- [X] 13A. Exhibit A, Origin and Breeding History of the Variety *(See Section 52 of the Plant Variety Protection Act.)*
- [X] 13B. Exhibit B, Botanical Description of the Variety
- [X] 13C. Exhibit C, Objective Description of the Variety
- [X] 13D. Exhibit D, Data Indicative of Novelty
- [X] 13E. Exhibit E, Statement of the Basis of Applicant's Ownership

14A. Does the applicant(s) specify that seed of this variety be sold by variety name only as a class of certified seed? *(See Section 83(a). (If "Yes," answer 14B and 14C below.)* [X] YES [ ] NO

14B. Does the applicant(s) specify that this variety be limited as to number of generations? [X] YES [ ] NO

14C. If "Yes," to 14B, how many generations of production beyond breeder seed? [X] FOUNDATION [X] REGISTERED [X] CERTIFIED

The applicant declares that a viable sample of basic seed of this variety will be deposited upon request before issuance of a certificate and will be replenished periodically in accordance with such regulations as may be applicable.

The undersigned applicant(s) of this sexually-reproduced novel plant variety believes that the variety is distinct, uniform, and stable as required in Section 41 and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act.

Applicant is informed that false representation herein can jeopardize protection and result in penalties.

5-13-76
(DATE)

James R. Welsh
(SIGNATURE OF APPLICANT)

(DATE)

(SIGNATURE OF APPLICANT)

00001

EXHIBIT A

Geneology - Lindon, CI 17440, is a selection of the cross II 21183/CO652363//Lancer/KS62136.

II 21183: Andes 64A/Sonora 64//Tacuari V-722-466-67 II 21183-7M-2Y-4M-1Y.

CO652363: Warrior 2/Kenya 58/Newthatch/2 (Cheyenne/Tenmark/ Mediterranean/Hope) 3/Parker.

KS62136: Norin 16/CI 12500//Kaw.

The breeding method used was a modified pedigree system. The original cross of II 21183/CO652363 was made on June 23, 1967. The second cross with Lancer/KS62136 was made on January 10, 1968. The F_1 was increased in the greenhouse in 1968 and in 1969 the F_2 space planted population was grown in the field at Fort Collins. Individual plant selection was propagated into the F_3 in 1970. The F_3 row selected was bulked but no head selections were taken. In 1971, seed from the F_3 bulked row was entered in a F_4 yield trial. Head selections were made in the F_4. In 1972, the F_5 head row labeled CO725055 was cut in bulk and advanced to the F_6 yield nursery in 1973. Approximately 250 heads were selected to propagate breeders seed in 1974. Also in 1974, CO725055 was entered in extensive yield testing in Colorado and in the Southern Regional Performance nursery. Approximately 250 pounds of breeders seed were produced in 1974. CO725055 was entered in the large scale milling and baking trials and evaluated by the Hard Winter Wheat Quality Advisory Committee in January 1975. The breeders seed was planted under irrigation in 1974 and approximately 600 bushels of foundation seed were harvested in 1975. This seed was distributed to Seed Growers in September of 1975 and the variety was named and released by the Colorado Variety Recommendation Committee on December 1, 1975.

Exhibit A.

Type and Frequency of Variants

Lindon was exposed to pollen from a tall awnless genotype during initial increase of breeders seed. Subsequently, foundation and registered seed had awnless tall variants in the ratio of 1:10,000 plants or less. A later breeders seed reproduction has been isolated from other genotypes and the awnless genotype removed as completely as possible so this variant should be greatly reduced or disappear completely in later seed multiplications.

Under an isolated reproductive system the variety has no other variants and is stable to the best of our knowledge with respect to genetic change caused by mutations or heterozygosity.

EXHIBIT B

Lindon produces seed which is small but has characteristically high test weight under a wide range of production conditions. The plant is dark green in the seedling stages and shows the effect of a dwarfing gene early in its growth stages when compared to standard height varieties. The mature plant is shorter in height compared with varieties such as Scout and Centurk although the height difference is reduced when grown under moisture stress. The flag leaf is erect and wide compared with the narrow drooping leaves of standard varieties. Lindon retains its dark green color until the onset of maturity.

FORM APPROVED. OMB NO. 40-R3712

FORM GR-470-6 (10-16-72)

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
GRAIN DIVISION
HYATTSVILLE, MARYLAND 20782

EXHIBIT C (Wheat)

OBJECTIVE DESCRIPTION OF VARIETY

WHEAT (*TRITICUM SPP.*)

INSTRUCTIONS: *See Reverse.*

NAME OF APPLICANT(S)
Colorado State Experiment Station

ADDRESS (*Street and No. or R.F.D. No., City, State, and ZIP Code*)
c/o Dr. J. R. Welsh
Department of Agronomy
Colorado State University, Fort Collins, CO 80523

FOR OFFICIAL USE ONLY

PVPO NUMBER
7600076

VARIETY NAME OR TEMPORARY DESIGNATION
Lindon

Place the appropriate number that describes the varietal character of this variety in the boxes below.
Place a zero in first box (e.g. [0][8][9] or [0][9]) when number is either 99 or less or 9 or less.

1. KIND:

[1] 1 = COMMON 2 = DURUM 3 = EMMER 4 = SPELT 5 = POLISH 6 = POULARD 7 = CLUB

2. TYPE:

[2] 1 = SPRING 2 = WINTER 3 = OTHER (*Specify*) _____ [2] 1 = SOFT 2 = HARD 3 = OTHER (*Specify*) _____

[ ] 1 = WHITE 2 = RED 3 = OTHER (*Specify*) _____

3. SEASON - NUMBER OF DAYS FROM EMERGENCE TO:

[2][5][6] FIRST FLOWERING [2][6][2] LAST FLOWERING

4. MATURITY (50% Flowering):

[ ][5] NO. OF DAYS *EARLIER* THAN ..... [5] 1 = ARTHUR 2 = SCOUT 3 = CHRIS

[ ][2] NO. OF DAYS *LATER* THAN ..... [2] 4 = LEMHI 5 = NUGAINES 6 = LEEDS

5. PLANT HEIGHT (From soil level to top of head):

[ ][9][4] CM. HIGH

[ ][ ] CM. TALLER THAN ..... [ ] 1 = ARTHUR 2 = SCOUT 3 = CHRIS

[1][0] CM. SHORTER THAN ..... [2] 4 = LEMHI 5 = NUGAINES 6 = LEEDS

6. PLANT COLOR AT BOOTING (See reverse):

[2] 1 = YELLOW GREEN 2 = GREEN 3 = BLUE GREEN

7. ANTHER COLOR:

[1] 1 = YELLOW 2 = PURPLE

8. STEM:

[1] Anthocyanin: 1 = ABSENT 2 = PRESENT

[1] Waxy bloom: 1 = ABSENT 2 = PRESENT

[1] Hairiness of last internode of rachis: 1 = ABSENT 2 = PRESENT

[1] Internodes: 1 = HOLLOW 2 = SOLID

[ ][5] NO. OF NODES (*Originating from node above ground*)

[2][5] CM. INTERNODE LENGTH BETWEEN FLAG LEAF AND LEAF BELOW

9. AURICLES:

[1] Anthocyanin: 1 = ABSENT 2 = PRESENT

[1] Hairiness: 1 = ABSENT 2 = PRESENT

10. LEAF:

[1] Flag leaf at booting stage: 1 = ERECT 2 = RECURVED 3 = OTHER (*Specify*): _____

[1] Flag leaf: 1 = NOT TWISTED 2 = TWISTED

[1] Hairs of first leaf sheath: 1 = ABSENT 2 = PRESENT

[ ] Waxy bloom of flag leaf sheath: 1 = ABSENT 2 = PRESENT

[1.][7] MM. LEAF WIDTH (*First leaf below flag leaf*)

[2][9] CM. LEAF LENGTH (*First leaf below flag leaf*):

00005

Lindon 7600076

11. HEAD:

[1] Density: 1 = LAX 2 = DENSE

[1] Shape: 1 = TAPERING 2 = STRAP 3 = CLAVATE 4 = OTHER *(Specify)* _____

[4] Awnedness: 1 = AWNLESS 2 = APICALLY AWNLETED 3 = AWNLETED 4 = AWNED

[1] Color at maturity: 1 = WHITE 2 = YELLOW 3 = PINK 4 = RED 5 = BROWN 6 = BLACK 7 = OTHER *(Specify)*: _____

[ ][7] CM. LENGTH

[1][0] MM. WIDTH

12. GLUMES AT MATURITY:

[2] Length: 1 = SHORT *(CA. 7 mm.)* 2 = MEDIUM *(CA. 8 mm.)* 3 = LONG *(CA. 9 mm.)*

[2] Width: 1 = NARROW *(CA. 3 mm.)* 2 = MEDIUM *(CA. 3.5 mm.)* 3 = WIDE *(CA. 4 mm.)*

[3] Shoulder shape: 1 = WANTING 2 = OBLIQUE 3 = ROUNDED 4 = SQUARE 5 = ELEVATED 6 = APICULATE

[3] Beak: 1 = OBTUSE 2 = ACUTE 3 = ACUMINATE

13. COLEOPTILE COLOR:

[1] 1 = WHITE 2 = RED 3 = PURPLE

14. SEEDLING ANTHOCYANIN:

[1] 1 = ABSENT 2 = PRESENT

15. JUVENILE PLANT GROWTH HABIT:

[2] 1 = PROSTRATE 2 = SEMI-ERECT 3 = ERECT

16. SEED:

[1] Shape: 1 = OVATE 2 = OVAL 3 = ELLIPTICAL

[1] Cheek: 1 = ROUNDED 2 = ANGULAR

[1] Brush: 1 = SHORT 2 = MEDIUM 3 = LONG

[1] Brush: 1 = NOT COLLARED 2 = COLLARED

[4] Phenol reaction *(See instructions)*: 1 = IVORY 2 = FAWN 3 = LT. BROWN 4 = BROWN 5 = BLACK

[3] Color: 1 = WHITE 2 = AMBER 3 = RED 4 = PURPLE 5 = OTHER *(Specify)* _____

[ ][6] MM. LENGTH [ ][3] MM. WIDTH [3.][5] GM. PER 100 SEEDS

17. SEED CREASE:

[3] Width: 1 = 60% OR LESS OF KERNEL 'WINOKA' 2 = 80% OR LESS OF KERNEL 'CHRIS' 3 = NEARLY AS WIDE AS KERNEL 'LEMHI'

[1] Depth: 1 = 20% OR LESS OF KERNEL 'SCOUT' 2 = 35% OR LESS OF KERNEL 'CHRIS' 3 = 50% OR LESS OF KERNEL 'LEMHI'

18. DISEASE: (0 = Not Tested, 1 = Susceptible, 2 = Resistant)

[2] STEM RUST *(Races)* 56, 15, 15B2, 151, 11-32-113,17 [0] LEAF RUST *(Races)* _____ [0] STRIPE RUST *(Races)* _____ [0] LOOSE SMUT

[0] POWDERY MILDEW [1] BUNT [ ] OTHER *(Specify)* _____

19. INSECT: (0 = Not Tested, 1 = Susceptible, 2 = Resistant)

[0] SAWFLY [0] APHID *(Bydv.)* [0] GREEN BUG [0] CEREAL LEAF BEETLE

[ ] OTHER *(Specify)* _____ HESSIAN FLY RACES: [ ] GP [ ] A [ ] B [ ] C [ ] D [ ] E [ ] F [ ] G

20. INDICATE WHICH VARIETY MOST CLOSELY RESEMBLES THAT SUBMITTED:

CHARACTER	NAME OF VARIETY	CHARACTER	NAME OF VARIETY
Plant tillering	Unknown	Seed size	Centurk
Leaf size	Nugaines	Seed shape	Centurk
Leaf color	Trapper	Coleoptile elongation	Nugaines
Leaf carriage	Nugaines	Seedling pigmentation	Trapper

INSTRUCTIONS

GENERAL: The following publications may be used as a reference aid for the standardization of terms and procedures for completing this form:

(a) L.W. Briggle and L. P. Reitz, 1963, Classification of Triticum Species and Wheat Varieties Grown in the United States, Technical Bulletin 1278, United States Department of Agriculture.

(b) W.E. Walls, 1965, A Standardized Phenol Method for Testing Wheat Seeds for Varietal Purity, contribution No. 28 to the handbook of seed testing prepared by the Association of Official Seed Analysts. *(See attachment.)*

LEAF COLOR: Nickerson's or any recognized color fan should be used to determine the leaf color of the described variety.

Exhibit D.

This is a supplement to the previously submitted exhibit D.

Centurk is the most similar variety. The most striking differences which result in the unique nature of Lindon are straw length (plant height) and straw strength. The previously submitted Irrigated Data which represent four replication trials at each of 3 locations in the years 1974 and 1975 show the average height of Lindon to be 37 inches and that of Centurk to be 43 inches. This difference will vary somewhat depending on environmental conditions but reduction in plant height is a unique feature of Lindon. This would also be true when comparisons are made between Lindon and most commonly grown hard red winter varieties such as Scout, Scout 66, Eagle, Sage, Trapper, Triumph, and others.

Resistance to lodging is also a unique feature of Lindon when compared to Centurk and other common Great Plains winter varieties. This is also indicated in the Irrigated Data table. A difference of 40° from vertical exists between these two varieties with Lindon being the stronger variety.

EXHIBIT D

The variety has been released on the performance data. It has a 5% yield advantage over standard varieties in comparative trials. It also has an excellent test weight. Data are presented to support the performance evaluation. The morphological novelty of Lindon is associated both with the erect wide flag leaf, dark green plant color, and the semi-dwarf stature.

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EXHIBIT D

Table 1. Performance Data Comparing Lindon with Standard Varieties in Colorado for 1973-1975

	Dryland Eastern Colorado 16 Station Years 1973, 1974, 1975		2 Sites '75 50% Hail	Whole Grain Protein 1975
	Yield	T.W.	Yield	Percent
Lindon	41.4	60.5	23.6	12.1
Centurk	40.4	59.1	18.8	12.0
Baca	38.2	59.9	15.5	11.7
Trapper	37.6	58.8	21.1	12.3
Wichita	33.9	60.4	12.8	12.1

IRRIGATED DATA

Walsh, Rocky Ford, Fort Collins

	Yield	Height	Stem Rust %	Lodge[1/]
Lindon	74.4	37	40	2
Centurk	74.9	43	15	6

[1/] 1 erect, 9 flat.

7600076

COLDROW (TALL)

LINDON (SEMI-DWARF)

7600076

EXHIBIT E

The applicant is the true owner of this owner of this variety and is the employer of the breeder.

APPLICATION NO. 7600076

VARIETY NAME 'Lindon'

Dr. James R. Welsh
Department of Agronomy
Colorado State University
Fort Collins, Colorado 80523

Test Results Based on the American Association of Cereal Chemists Approved Method (AACC)

1. Straight dough development time ratio:
   Farino graph _____
   Dough-mixer

2.

Baking Ingredients	Arrival time--minutes	Peak time	Stability--minutes	Curve center height B.U.	Height at end B.U.
Yeast					
No rest					
4 hr. rest					

3. Protein percentage 12.62

Table 1. Chemical, Milling, and Baking Data for the Colorado Variety Test Composites of Hard Winter Wheat Varieties Harvested at Ten Locations in 1975. 1/

Variety	C.I. or Sel. No.	Wheat 2/				Flour 2/		Bread-baking Data 2/					
									Mixing Time 3/			Loaf Volume	
		Wt. Per Bu.	Ash	Protein	Flour Yield	Ash	Protein	Absorption	As Rec'd	Corrected To 12.0% P	Crumb Grain	As Rec'd	Corrected To 11.0% P
		lbs.	%	%	%	%	%	%	min.	min.		cc.	cc.
Wichita	11952	61.9	1.67	12.5	75.3	.45	11.8	60.8	2⅝	2⅜	Q-S	893	840
Warrior	13190	61.1	1.58	11.5	74.1	.43	10.6	62.5	5	4 ⅛	S	875	905
Scout	13546	61.3	1.56	11.7	74.1	.43	10.8	63.7	4⅝	3¾	S	833	847
Lancer	13547	61.4	1.57	11.9	75.8	.45	10.7	63.0	4½	3¾	S	868	890
Scout 66	13996	61.3	1.51	12.1	74.5	.43	11.1	63.2	4 ⅝	4 ⅛	S	843	836
Trapper	13999	61.0	1.57	11.9	75.2	.47	10.9	65.6	7½	6½ Q	S	905	913
Eagle	15068	61.7	1.54	12.3	75.1	.45	11.5	66.3	7⅝	7⅛ Q	S	918	882
Centurk	15075	61.2	1.50	11.7	73.2	.43	10.5	64.8	7 ⅛	5 ⅞ Q	S	850	886
Tam 101	15324	61.5	1.65	12.9	73.2 4/	.45	11.8	63.0	3⅝	3½	S	933	875
Baca	15891	61.2	1.50	11.6	73.3	.40	10.6	65.4	5⅝	4⅝	S	845	873
Hi Plains	17262	61.3	1.63	11.7	74.5	.47	10.7	63.4	5 ⅜	4 ½	S	904	927
Buckskin	17263	60.9	1.49	12.0	71.4	.42	10.8	66.4	8½	7¼ Q	S	908	924
Sentinel	17265	60.3	1.59	12.3	73.1	.44	11.5	66.8	5⅞	5½	S	898	863
Cloud	17276	61.2	1.52	11.7	75.1	.44	10.7	63.1	4 ⅛	3 ½	S	881	904
Sage	17277	61.0	1.55	12.0	73.5	.41	11.0	63.8	5	4⅜	S	857	857

Table 1. (cont.), page 2

Variety	C.I. or Sel. No.	Wheat[2] Wt. Per Bu.	Wheat[2] Ash	Wheat[2] Protein	Wheat[2] Flour Yield	Flour[2] Ash	Flour[2] Protein	Bread-baking Data[2] Absorption	Mixing Time[3] As Rec'd	Mixing Time[3] Corrected To	Crumb Grain	Loaf Volume As Rec'd	Loaf Volume Corrected To
		lbs.	%	%	%	%	%	%	min.	min. 12.0% P		cc.	cc. 11.0% P
Trison	17278	62.0	1.56	12.7	75.1	.43	12.1	65.1	3½	-	S	943	865
FN7173	17350	62.0	1.65	12.4	72.8	.42	11.2	66.5	6 5/8	6 Q	S	895	880
Lancota	17389	61.7	1.49	12.1	74.2	.40	11.3	64.7	4¼	3⅞	S	940	917
Vona		61.9	1.49	10.8	74.2 4/	.40	9.8	63.8	5⅜	4	S	838	928 5/
C0725052		62.3	1.51	11.5	74.6 4/	.38	10.3	62.9	5	4	S	888	942 5/
Lindon		62.7	1.59	11.9	73.2 4/	.37	11.0	66.2	5¼	4⅜	S	910	910 5/
C0725061		62.5	1.49	10.5	72.7 4/	.35	9.2	63.7	5⅝	3¾	S	803	937 5/
C0725082		62.5	1.54	10.9	73.4 4/	.38	9.6	64.4	8 ¼	5 ⅞ Q	S	800	899

1/ Chemical data expressed on a 14% moisture basis.

2/ S, Q, and U - Satisfactory, questionable, and unsatisfactory quality with respect to property in question. A satisfactory rating is inferred in the absence of a designated one. One unsatisfactory rating, in general, characterizes a variety as undesirable for hard wheat milling and breadmaking purposes. Crumb colors were satisfactory for all entrie

3/ Mixing time used in baking is evaluated in conjunction with other mixing properties obtained from the 10-g. mixogram.

4/ Softer than average hard wheat milling properties but entirely satisfactory.

5/ Promising overall quality characteristics.

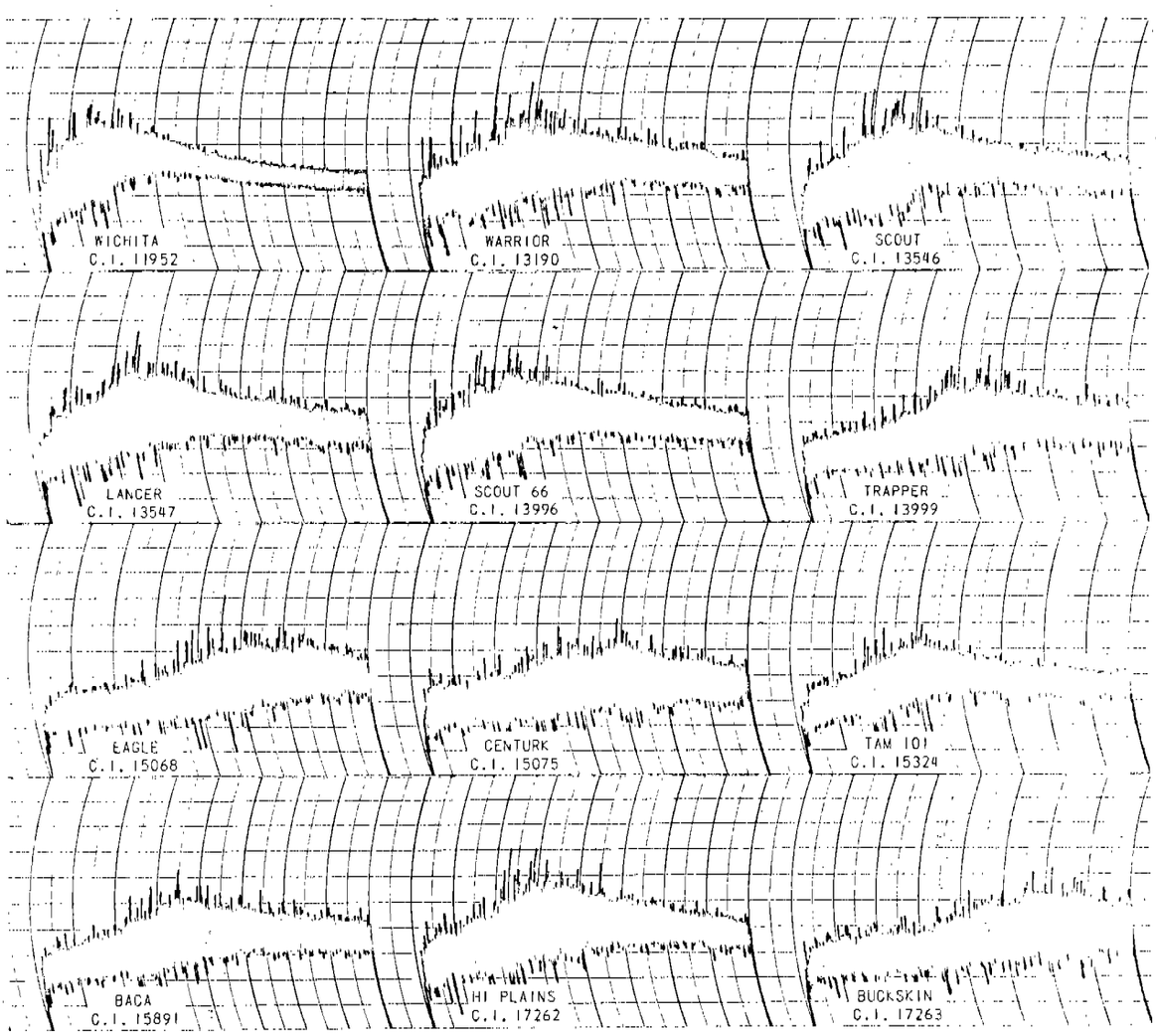

Fig. 1. Mixograms (10-g.) for the Colorado variety test composites of hard winter wheat varieties harvested at ten locations in 1975.

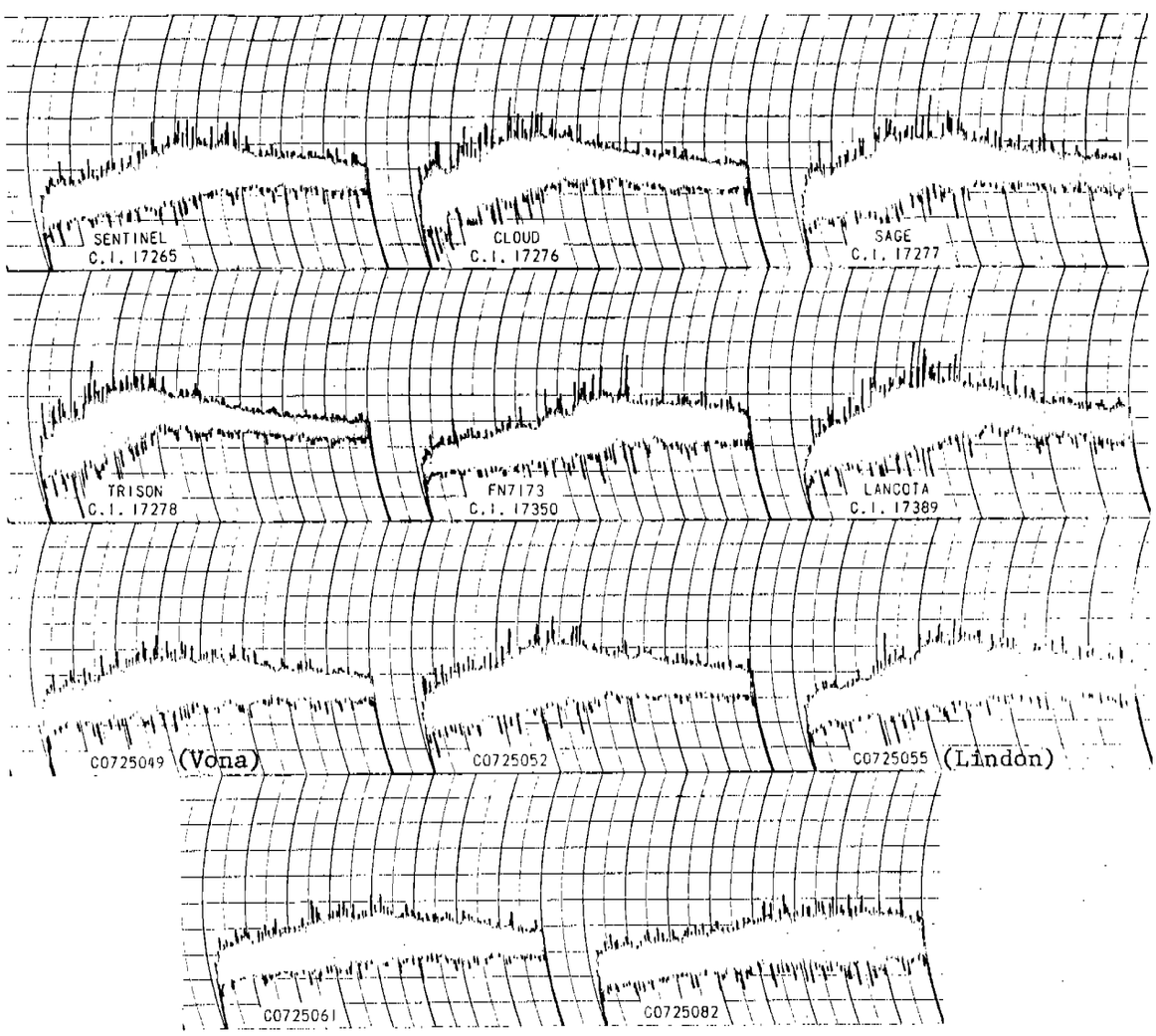

Fig. 2. Mixograms (10-g.) for the Colorado variety test composites of hard winter wheat varieties harvested at ten locations in 1975.